CLAIMS

1. A compass with electromagnetic half-shell energy transmission and optoelectronic data transmission,
   characterized in that
   in the half-shell transformer (14,16) the at least one winding on the primary half-shell is connected via an H-bridge circuit (12) to controllable input voltage source (10), and at least one secondary winding is provided on the other half-shell coil, which secondary winding is provided with a plurality of taps for the voltage supply of, among other things, the heating, the internal electronics controlling the voltage supply, and the gyrosphere motor supply.
2. The compass according to claim 1, characterized by a plurality of intertwined bifilar coil windings with a different number of windings at least on the secondary half-shell coil.
3. The compass according to claim 1, characterized in that due to an increased energy requirement at the secondary side, the control device of the voltage level of the input voltage source (10) is connected to the optical signal transmission path (30,32) to receive control data.
4. The compass according to claim 1, characterized in that
   the control device (20) of the amplitude areas of the rectangular signal generated by the H-bridge circuit (12) is provided with a sensor (22) for detecting the generated rectangular signals at (one of) the primary winding(s) to avoid magnetic losses on the primary side, especially if there are unequal flank slopes, for the transmission of corrective control data to the H-bridge circuit.
5. The compass according to claim 4, characterized in that the H-bridge is provided with MOSFET transistors with boot strap loaders.
6. The compass according to claim 1, characterized in that an encoder is provided on the half-shell transformer for detecting the angular position.